NATIONAL AIR INTELLIGENCE CENTER



THE UNITED STATES MILITARY BEGINS TO RECOGNIZE THE SUSCEPTIBILITY OF THE GLOBAL POSITIONING SYSTEM TO JAMMING



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Chinese Astronautics and Missilery Abstracts (Zhongguo Daodan Yu Hangtian Wenzhai)
1994 Volume 1, Number 1

THE UNITED STATES MILITARY BEGINS TO RECOGNIZE THE SUSCEPTIBILITY OF THE GLOBAL POSITIONING SYSTEM TO JAMMING

(Romanized title: Meijun Kaishi Zhongshi Quanqiu Dingwei Xitong Yishou Ganrao Wenti)

(No author credited)

In mid-1993, the United States Department of Defense directed the Defense Science Board (DSB) to establish a task force specifically devoted to the study of the susceptibility of the Global Positioning System (GPS) to jamming and methods of countering jamming. Its purposes were to solve problems having to do with the survivability of GPS when encountering enemy jamming and to find ways to improve its antijamming capabilities.

GPS repeatedly performed outstanding service in the Persian Gulf War. American military vehicles, ships, and airplanes were all fitted with GPS equipment, and portable receivers played complementary roles. In addition, many GPS receivers were fitted to the guidance and control equipment in tactical missiles and precision-guided ammunition. This situation caused the Pentagon to worry that, in future wars, if the enemy takes effective electronic countermeasures, an overreliance on GPS will bring about results that are just the opposite of what was desired. In view of this consideration, the office of the Assistant Secretary of Defense demanded that the task force established by the DSB put forward an optimal technological plan to improve the antijamming capabilities of GPS and especially emphasized that this improvement should be applied to GPS in tactical weapon systems.

In concrete terms, the missions of the task force are: (1.) To make an estimate of present and future jamming threats to the GPS receivers installed in weapon systems. Of course, these jammers have not yet been formally "acknowledged" as threats. (2.) To find out which parts of GPS installed in weapon systems are susceptible to jamming. The weapon system platforms the task force will consider are attack planes, cruise missiles, precision-guided weapons, and portable

receivers. (3.) To suggest ways to "truly" keep enemy troops from using GPS (and GLONASS), while only allowing the United States military to use them. The task force must also appraise the potential effects the above recommendations would have on military war preparations.

It is estimated that the task force will complete the above-mentioned research report in January, 1995.

Note: Since there are already complete English translations accompanying the Chinese listings in "List of Sources" on pages 140 and 141, it is unnecessary to translate this section.